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Attorney Docket No. 2373

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Zhang

Serial No.: 09/580,884

Examiner: Sanders, K.

Filed: May 30, 2000

Group: 1714

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OFFICE OF PETITIONS

For: **Bioabsorbable Blends and Surgical Articles Therefrom**

37 C.F.R. § 1.137 (a) PETITION FOR REVIVAL OF UNAVOIDABLE ABANDONED APPLICATION

Asst. Commissioner For Patents
Washington, D.C. 20231

Sir:

The Examiner sent a Notice of Abandonment January 29, 2003. This Application has thus been abandoned. Therefore, the abandonment of the present application was due to no fault of the applicants and was unavoidable at least for the following reasons:

- 1) An Office Action was issued February 2, 2001.
- 2) A fully responsive Response was timely filed on May 4, 2001 complete with a Petition for a one month extension of time. (See Exhibit 1 which includes a signed Certificate of Mailing.)
- 3) The Notice of Abandonment received January 29, 2003 alleges that a Notice of Non-Compliant Amendment was mailed by the Examiner on May 14, 2001.
- 4) Applicants' never received any such notice (See Exhibit 2 which includes an Affidavit of U.S. Surgical's docket clerk.)

Therefore Applicants respectfully petition for revival of the above-identified application under the provisions of 37 CFR § 1.137 (a). This petition is made within one year from the date of abandonment.

The reply to the outstanding Office Action was filed previously with the United States Patent and Trademark Office (See above) nonetheless, the Response complete with "clean" and "marked-up" versions of the claims is submitted herewith as Exhibit 3.

Please charge the petition fee of \$110.00 as required under 37 CFR § 1.17 (L) to Deposit Account No. 21⁹550.

12/04/2003 SDEN3081 00000084 210350 09500884

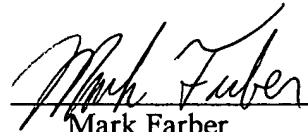
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All the requirements of 37 CFR § 1.137 (A) having been complied with, it is courteously requested that this application be restored to pending status.

The commissioner is hereby authorized to charge any additional fees which may be required for this application, or credit any overpayment of Deposit Account No. 21-550. **TWO DUPLICATE COPIES OF THIS SHEET ARE ENCLOSED.**

Respectfully Submitted,

Dated: December 1, 2003


Mark Farber
Reg. No. 34,159
Attorney for Applicants

Mark Farber
United States Surgical, a division of
Tyco Healthcare Group LP
150 Glover Avenue
Norwalk, CT 06856
(203) 845-1059



Docket No. 2373

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Zhang

Serial No.: 09/580,884

Examiner: Sanders, K

Filed: May 30, 2000

Art Unit: 1714

For: **Bioabsorbable Blends and Surgical Articles Therefrom**

CERTIFICATE OF EXPRESS MAILING

Date of Deposit: December 2, 2003


I hereby certify that the following:

Certificate of Express Mailing Label No.: ET710030859US

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- ☒ This Certificate of Express Mailing
- ☒ Petition For Revival of Unavoidable Abandoned Application
- ☒ Response filed May 4, 2001 with a Petition for a one month extension of time
(also included is a Certificate of Mailing)
- ☒ Affidavit of Aida Casiano
- ☒ Return postcard

are being deposited with the United States Postal Service first-class mail on the Date of Deposit indicated above in an envelope addressed to Mail Stop Petition, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.


Rebecca Layman

Mark Farber
C/O
TYCO HEALTHCARE GROUP LP
150 Glover Avenue
Norwalk, CT 06856
203-845-1059



Serial No. 09/580,884 Docket No. 2327 Art Group 1714 ATTY: MF
TITLE: Bioabsorbable Blends and Surgical
Patents: Articles Therefrom Inventor/Applicant: Zhang

☐ A patent application including pages of abstract, specification and claims
☐ Request for Filing (FWC) (RULE 60) Appln
☐ (Continuation) (Divisional) (CIP) (Provisional) Appln
☐ _____ sheets of drawing ☐ formal ☐ informal
☐ Declaration of POA ☐ executed ☐ unexecuted
☐ Assignment ☐ executed ☐ unexecuted
☐ Recordation Form Cover Sheet
☐ Application Transmittal Letter
☐ Amendment
☐ Amendment Fee Transmittal
☐ Petition and Fee for Extension of Time
☐ Information Disclosure Statement
☐ Submission of Formal Drawings
☐ PTO Form 1449 and Copies of Cited References
☐ Issue Fee Transmittal
☐ Certificate under 37 CFR (b)
☐ Revocation and Substitute Power of Attorney
☐ Completion of Filing Requirements

Trademarks:
☐ Application (ITU) (Actual Use)
☐ Drawing Page (of the Mark)
☐ Transmittal Letter
☐ Statement of Use
☐ Petition for Extension of Time
☐ _____ specimens of the mark
☐ Response
☐ Affidavit
☐ Letter

☒ One Month Extension c
☐ Time
☒ Response to Office Act
☐ _____
☒ Certificate of Mailing
☐ Certificate of Express Mailing
No. _____
☒ Return postcard
DATE: May 4, 2001



Docket No. 2373

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Zhang

Serial No.: 09/580,884

Examiner: Sanders, K.

Filed: May 30, 2000

Art Unit: 1714

For: **Bioabsorbable Blends and Surgical Articles Therefrom**

CERTIFICATE OF MAILING

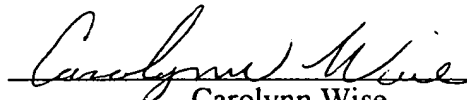
Date of Deposit: May 4, 2001

I hereby certify that the following:

- ☒ This Certificate of Mailing
- ☒ Response to Office Action
- ☒ One Month Extension of Time
- ☒ Return postcard

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are being deposited with the United States Postal Service first-class mail on the Date of Deposit indicated above in an envelope addressed to the Assistant Commissioner of Patents, Washington, D.C. 20231.


Carolynn Wise

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blend comprising at least one bioabsorbable component and a cyanoacrylate component. Regula merely discloses:

A process for enhancing the security of implantable surgical devices secured to bone tissue comprising implanting a surgical device with a biocompatible adhesive and/or sealant provided in an amount effective to increase the security of the implanted surgical device.

In another embodiment Regula also provided an implantable surgical device comprising and implantable surgical device coated with a biocompatible adhesive or sealant. (see column 1, lines 44 et seq.)

Regula then enumerates suitable adhesives. Suitable cyanocrylates adhesives are discussed at column 2, line 19-column 4, line 8. Then other suitable biocompatible adhesives are discussed at column 4, line 9-column 4, line 34. At column 4, line 35 et seq. suitable bioabsorbable materials which may be used as an adhesive are disclosed. Applicants respectfully direct Examiner's attention to Example 4 bridging columns 8 and 9, and specifically to Table 1, at column 9, which clearly shows that the Vetbond adhesive, the DMMM adhesive, and the PCL adhesive were comparatively tested and thus applied separately and not blended together.

Response to rejection of claims 1 and 9-13 under 35 U.S.C. § 102 (e) as anticipated by Hyon (U.S. 6,103,778).

Applicants respectfully submit that Hyon does not disclose every element of the presently pending claims at least for the following reasons. Hyon does not disclose a blend comprising at least one bioabsorbable component and one cyanoacrylate component wherein the bioabsorbable component is glycolide, trimethylene carbonate, dioxanone caprolactone, alkylene glycol, esteramide, or copolymers thereof.

Hyon merely disclosed "adhesive compositions of alpha-cyanoacrylate for surgical use" (see column 2, lines 40-41). At column 3, lines 20 et seq. Hyon discloses:

In order to meet the above criteria, the present invention is a novel adhesive composition for surgical use, which is prepared by adding polymers to an alpha-cyanoacrylate adhesive composition to provide an easily biodegrading and bioabsorbing adhesive composition. The polymers include the co-polymer of DL-lactic acid and ϵ -caprolactone or the co-polymer of DL-lactic acid, and ethylene glycol and ϵ -caprolactone, or the co-polymer of the ethylene glycol and ϵ -caprolactone.

Response to the rejection of claims 1-18 as obvious over Hyon (6,103,778) in view of Bennett (5,543,218).

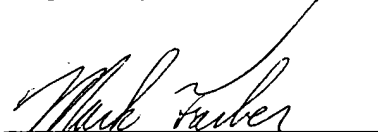
Applicants respectfully traverse the above rejection at least for the following reasons. There is no disclosure in Hyon that the bioabsorbable materials of Bennett would be suitable to blend with the presently claimed cyanoacrylates to fabricate a surgical adhesive. Moreover, there is no disclosure in Bennett that the materials disclosed therein could be successfully blended with cyanoacrylate type materials to fabricate a surgical adhesive. Applicants respectfully submit that the only disclosure of the presently pending claims is in applicants' disclosure. Therefore, since the only motivation to combine the references resides in applicants' presently pending application, the reconsideration and withdrawal of this impermissible hindsight rejection is respectfully requested.

Therefore, applicants respectfully request that the rejection be withdrawn and claims allowed.

The Examiner is invited to contact the undersigned should he believe this would expedite prosecution of this application.

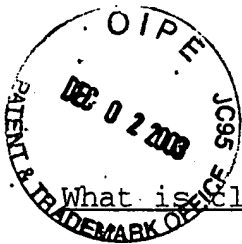
Respectfully submitted,

Date: 5/4/01



Mark Farber
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What is claimed is:

1. A blend comprising at least one bioabsorbable component and a cyanoacrylate component.
2. The blend of claim 1 wherein the bioabsorbable component comprises about 40 weight percent to about 95 weight percent of the blend.
3. The blend of claim 1 wherein the bioabsorbable component comprises about 5 weight percent to about 60 weight percent of the blend.
4. The blend of claim 1 wherein the bioabsorbable component comprises about 10 weight percent to about 40 weight percent of the blend.
5. The blend of claim 1 wherein the bioabsorbable component comprises about 12 weight percent to about 20 weight percent of the blend.
6. The blend of claim 1 wherein the cyanoacrylate component comprises about 40 weight percent to about 95 weight percent of the blend.
7. The blend of claim 1 wherein the cyanoacrylate component comprises about 60 weight percent to about 90 weight percent of the blend.
8. The blend of claim 1 wherein the cyanoacrylate component comprises about 80 weight percent to about 88 weight percent of the blend.
9. The blend of claim 1 wherein the bioabsorbable component is selected from the group consisting of glycolide, lactide,

trimethylene carbonate, dioxanone, caprolactone, alkylene glycols, esteramides, and copolymers thereof.

10. The blend of claim 1 wherein the bioabsorbable component comprises a copolymer comprising a predominant amount of epsilon-caprolactone and a minor amount of at least one other copolymerizable monomer.

11. The blend of claim 10 wherein the other copolymerizable monomer(s) are selected from glycolide, lactide, trimethylene carbonate and dioxanone.

12. The blend of claim 1 wherein the bioabsorbable component comprises a copolymer comprising a predominant amount of trimethylene carbonate and a minor amount of at least one other monomer copolymerizable therewith.

13. The blend of claim 1 wherein the cyanoacrylate component comprises branched or straight chain C_4 - C_{12} cyanoacrylates, straight or branched chain alkyloxyalkyl cyanoacrylates; straight or branched chain cyanoacrylates having multiple ether or ester linkages therein; and ethylenically unsaturated cyanoacrylates with functional groups such as cyclic alkanes.

14. The blend of claim 1 wherein the cyanoacrylate component is selected from the group consisting n-butyl cyanoacrylate, perfluoro butyl cyanoacrylate, tert-butyl cyanoacrylate, pentyl cyanoacrylate, hexyl cyanoacrylate, n-octyl cyanoacrylate, 2-octyl cyanoacrylate.

15. The blend of claim 1 wherein the bioabsorbable component comprises:

a copolymer comprising a predominant amount of epsilon-caprolactone and a minor amount of glycolide; and

the cyanoacrylate component comprises n-butyl cyanoacrylate.

16. The blend of claim 1 wherein the bioabsorbable component comprises:

a copolymer containing units derived from glycolide and epsilon-caprolactone; and

the cyanoacrylate component comprises n-butyl cyanoacrylate.

17. The blend of claim 1 wherein the bioabsorbable component comprises:

a copolymer containing units derived from lactide and epsilon-caprolactone; and

the cyanoacrylate component comprises n-butyl cyanoacrylate.

18. The blend of claim 1 wherein the bioabsorbable component comprises:

a copolymer containing units derived from glycolide and trimethylene carbonate; and

the cyanoacrylate component comprises n-butyl cyanoacrylate.



Marked up Version

What is claimed is:

1. (Amended) A blend comprising at least one bioabsorbable component and a cyanoacrylate component wherein the bioabsorbable component is selected from the group consisting of glycolide, trimethylene carbonate, dioxanone, caprolactone, alkylene glycols, esteramides, and copolymers thereof.



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Group: 1714

State of Connecticut)
) ss Norwalk, CT
County of Fairfield)

AFFIDAVIT OF Aida Casiano

1. I currently oversee docketing of Actions received from the United States Patent and Trademark Office at U.S. Surgical.

2. When mail is received from the United States Patent and Trademark Office (USPTO) at U.S. Surgical it is opened and docketed.

3. I checked the U.S. Surgical docket and there is no record of any Office Action in the above referenced case received by U.S. Surgical after January of 2001 until the Notice of Abandonment mailed by the U.S.P.T.O. on January 29, 2003.

FURTHER AFFIANT SAYETH NOT.

Aida Casiano
Aida Casiano

SUBSCRIBED AND SWORN to before me on this 1st day of December 2003.

Heather B. Booth
Notary Public in and for the
State of Connecticut

HEATHER B. BOOTH
NOTARY PUBLIC

Printed Name of Notary **MY COMMISSION EXPIRES 3/31/2005**

My commission expires:

3/31/2005

